

1     Claims

2             I (We) claim:

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4     1. In a modular prosthesis to be used in bone joint replacement  
5     having a weight bearing component with a proximal end, a distal  
6     end, and a through bore therebetween, an intramedullary rod  
7     having a distal end and a proximal end adapted to be connected to  
8     said weight bearing component, the improvement comprising a sub-  
9     assembly composed of an elongated link having a proximal end and  
10    a distal end, said distal end of said link connected with a  
11    tubular extension having a mouth, said connection permitting  
12    relative rotational and longitudinal movement between said  
13    tubular extension and said link, said tubular extension rigidly  
14    affixed to said proximal end of said intramedullary rod whereby  
15    said proximal end of said link is adapted for insertion in said  
16    through bore.

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18    2. In a modular prosthesis of claim 1 said improvement  
19    comprising an enlargement near said distal end of said link, said  
20    tubular extension disposed between said enlargement and said  
21    proximal end of said link, said mouth being smaller than said  
22    enlargement.

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1 3. In a modular prosthesis of claim 1, said improvement  
2 comprising said proximal end of said intramedullary rod having a  
3 blind bore, said distal end of said link received in said blind  
4 bore.

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6 4. In a modular prosthesis of claim 1, said improvement  
7 comprising said proximal end of said link having a planar  
8 surface, said through bore having a complementary shape whereby  
9 said link and said weight bearing component are adapted to be  
10 rotationally fixed when said link is received in said through  
11 bore.

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13 5. A modular joint prosthesis comprising a neck, a trochanter, a  
14 fastener and a sub-assembly including an intramedullary rod and a  
15 link, said neck having a through bore, said trochanter having a  
16 through bore, said link and said intramedullary rod of said sub-  
17 assembly relatively movable, said link adapted to be telescoped  
18 with said through bore of said trochanter and said through bore  
19 of said neck whereby said trochanter is between said  
20 intramedullary rod and said neck and said fastener is adapted to  
21 lock said neck, said trochanter and said sub-assembly together.

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23 6. A modular joint of claim 5 wherein said sub-assembly includes

1 a tubular extension affixed to said intramedullary rod and  
2 encircles said link, said link and said tubular extension  
3 relatively movable.  
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5 7. A modular joint of claim 5 wherein said through bore in said  
6 trochanter is tapered and said tubular extension includes a  
7 complementary taper whereby said complementary tapers combine to  
8 form a press fit.  
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10 8. A modular joint of claim 5 wherein said link has planar  
11 surfaces and said through bore of said trochanter has  
12 complementary surfaces whereby said link and said trochanter are  
13 adapted be non-rotationally connected.  
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15 9. An artificial hip joint comprising a neck having a  
16 longitudinal axis with an arm for receiving a ball extending at  
17 an angle from said longitudinal axis, a through bore with an  
18 annular skirt along said longitudinal axis, said through bore  
19 being countersunk, a trochanter with a through bore, a portion of  
20 said trochanter through bore adapted to receive said annular  
21 skirt for rotational movement, an end portion of said trochanter  
22 through bore being tapered, and an integrally formed sub-assembly  
23 having a link and a intramedullary rod connected by a tubular

1 extension with the link and the intramedullary rod being  
2 relatively movable, said link including a threaded bore, said  
3 link adapted for insertion in said countersunk through bore and  
4 said trochanter through bore, said tubular extension having a  
5 taper complementary with said taper of said tapered end portion  
6 of said trochanter through bore whereby

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